Remarks

In the Office action mailed May 21, 2004, the Examiner required Applicant, pursuant to 35 U.S.C. § 121, to elect a single disclosed species. The Examiner stated that claim 1 and 46 are generic to a plurality of disclosed patentably distinct species comprising:

(1) the electric motor -- claims 2-7, 14, 15, 17, 18, 27-35, 47-52, 59, 60 and 72-80;

(2) the speed control circuit -- claims 8-13, 16, 53-58, and 61-63;

(3) the sequencing circuit -- claims 19-22 and 64-67;

(4) the cycling circuit -- claims 23-26 and 68-71;

(5) the coil operating circuit -- claims 36-41 and 81-86; and,

(6) the controlling circuit -- claims 36, 42-45, 81, and 87-94.

Applicant elects, ***with traverse,*** to proceed on the first group, namely, claims 2-7, 14, 15, 17, 18, 27-35, 47-52, 59, 60 and 72-80.

Applicant traverses the election requirement based on Section 804.04(f) of the Manual of Patent Examining Procedure ("MPEP"), which provides, "Claims to be restricted to different species must be mutually exclusive." In Applicant's invention, the six features identified by the Examiner as separate species are not all mutually exclusive. To the contrary, the preferred embodiment includes five of these "species." That is, Applicant's invention may comprise a vehicle with an electric motor having a supporting structure from group 1, a speed control circuit from group 2, a sequencing circuit from group 3, a cycling circuit from group 4, and a coil operating circuit from either group 5 or 6.

Only one species of a speed control circuit is claimed, namely, in claims 8-13 and 53-58. Only one species of sequencing circuit is claimed, namely, in claims 19-22 and 64-67. Only one species of cycling circuit is claimed, namely, in claims 23-26 and 68-71.

The first group of claims relates mainly to the support structures for the motor and its magnet components. Applicant claims two alternative species of support structure – the endless belt configuration of claims 3-6 and 14, and 48-51 and 59, as seen in Figure 2, and the stator and rotor configuration of claims 15 and 32-35, and 60 and 77-80, as seen in Figure 12.

Claims 36 and 81 recite that there is a coil operating circuit for each coil, and there are two species of the coil operating circuit defined in the claims. In claims 37-41 and 82-86 of group 5, the coil operating circuit utilizes MOSFET's, shown in Figure 10, whereas in claims 42-45 and 87-90 of group 6, the coil operating circuit utilizes SCR's, shown in Figure 14. It should be noted, though, that the MOSFET circuit, though illustrated as part of the endless belt support structure, could be used with the rotor and stator support, and the SCR circuit, though shown with the rotor and stator support, could utilized with the endless belt structure.

Even with these alternative embodiments of the support structure and coil operating circuit, Applicant has not included more than a reasonable number of species in this application. Applicant is entitled, under 37 C.F.R. § 1.141, to include in one application a reasonable number of alternative embodiments claimed in dependent form. Accordingly, Applicant submits that the claims in this application contain no more than reasonable number of species and requests withdrawal of the requirement for an election of species.

Applicant has made corrections of a minor nature in the claims (claims 17 and 27) to correct improper dependencies.

Submitted herewith is a proposed replacement sheet 4 (Figure 6) of the drawings with the proposed change highlighted in yellow. Upon receiving the Examiner's approval, Applicant will submit a final substitute sheet to the Official Draftsperson.

This is intended to be a complete response to the Office action mailed May 21, 2004.

Respectfully Submitted,

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